

FUNDAMENTAL EDUCATION

A QUARTERLY BULLETIN

Vol. II, No 1

January 1950

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UNESCO PUBLICATION 640

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UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND
CULTURAL ORGANIZATION

FOREWORD

THE BULLETIN now goes into its second year—an appropriate time for an examination of the policy and contents that have gone to make it.

Some technical points first. It seems that a modest size of about 32 pages is adequate, and that efforts should rather be directed towards wider diffusion. The present printing is 7000 copies (in three languages) and a slowly rising number of sales and subscriptions is the condition for any future expansion. Starting with this issue the Spanish edition is being printed in Mexico City, for distribution direct to Latin America.

The title of the Bulletin has been reversed, bringing the name *Fundamental Education* first, in order to avoid confusion, as a large number of Unesco publications have the word 'bulletin' in their titles. Otherwise the general format and lay-out are being kept constant. The cover, incidentally, is itself a record of fundamental education work—the original cloth comes from a weaving and embroidery co-operative established in eastern Nigeria.

On the more important issue of content one cannot yet judge finally. The Bulletin has received a friendly welcome from a number of educational journals in Europe and America; and field workers are beginning to send in contributions of their own accord. The problem now becomes one of the 'technical detail' contained in articles. It is inevitable that a writer who deals with say, the Indonesian literacy campaign or a Lebanese village experiment, will feel compelled to treat his subject broadly, almost journalistically; for few readers will be acquainted with the work or its social context. The limit placed on length—about 2000 words—is another bar to technical descriptions of 'how it is done'. Certain solutions suggest themselves: that contributors should send in follow-up material in greater detail; and that the final rubric, 'Notes and Records', be converted into real notes and records for short news-flashes which record the progress of campaigns or experiments already described. This, then, is a further request to readers and contributors.

The next, April, issue of the Bulletin is being devoted in the main to fundamental education work in Brazil. Although that country has made remarkable contributions to many branches of education, educators elsewhere remain ill-informed because of language difficulties; this issue of the Bulletin may serve at least to introduce some of these experiments to non-American readers.

THE RURAL SECOND UNIT AT PORTO RICO AN EFFECTIVE SOCIAL INSTRUMENT

BY ELISEO BERRIOS

THE EVOLUTION OF THE PORTO RICAN RURAL SCHOOL

There are three outstanding events in the development of rural education in Porto Rico, namely: (1) the extension of educational facilities to the rural population; (2) the amalgamation of schools, and (3) the creation of the rural second unit.

At the end of the 1899 school year, one year after the American invasion, the island of Porto Rico had 313 rural schools. There were 426 districts without schools and 267,630 children without educational facilities, i.e. approximately one-third of the rural population.¹ Thanks mainly to the praiseworthy efforts of early commissioners of education, the number of schools increased rapidly and had doubled by 1907. The commissioners also tried to evolve a school programme calculated to meet the essential and most urgent needs of Porto Rican life. As agriculture was the principal means of livelihood in the country, its teaching received special emphasis in the scheme of studies. To this end agricultural schools were set up, organized on the same lines as ordinary schools but with a plot of land attached for the purpose of teaching children simple agricultural practice such as the cultivation of kitchen gardens. The first schools of this type were opened in the districts of Caguas, Guayama, Humacao, San German, Yauco, Aguadilla and Manati.² The lack of competent teachers and the ever increasing attention given to the more academic subjects led to the amalgamation of these schools with the rural schools.

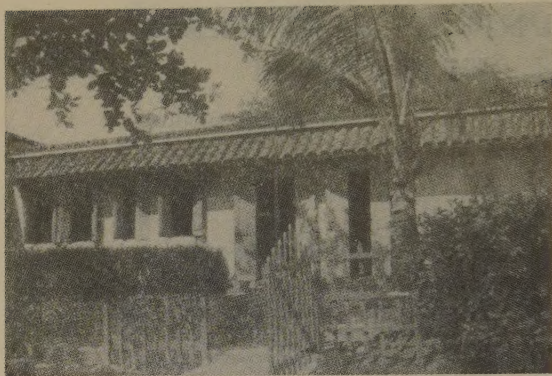
Up to the school year 1908-09 teaching in rural schools was confined to the first three grades. From that date onwards, and where numbers warranted it, higher grades were started until the normal eight-grade rural school was achieved in the year 1917-18.³ To cover the full range of all grades two teachers at least were required. It thus became necessary to amalgamate schools. The necessary enquiries were carried out during the school year 1915-16. The municipality of Arecibo, which had one of the most commodious and convenient school buildings, was the site of the first central school, regarded as a model, which was set up in the Santana commune. The two teachers in charge divided the work, one taking the higher, and the other the lower grades. The next central schools were set up in the coastal belt where good roads made them accessible to all children. The number of new schools increased with such speed that in 1920 there were 96 in the island, two of which offered the full course up to the eighth grade as laid down for grade schools.⁴ The intention of the Education Department was to provide the pupils attending the central schools with a training equal in quantity and quality to that received by the pupils of urban schools. From every point of view this measure amounted to a step forward in the education of the countryman. The central schools were urban schools transplanted into the countryside.

¹ John J. Osuna, *Education on Porto Rico*, page 202.

² Report of the Commissioner of Education of Porto Rico, 1901, page 50.

³ Report of the Commissioner of Education of Porto Rico, 1918, page 535.

⁴ Report of the Governor of Puerto Rico, 1920, page 411.



A typical building put up by the Porto Rican Reconstruction Administration (Second unit at Campo Rico, Canóvanas).⁴

THE RURAL SECOND UNIT: ORIGIN AND FUNCTIONS

According to the 1940 Federal Census, the number of small landholders in Porto Rico has shrunk alarmingly during the last few decades¹ and large numbers of peasants have moved to the towns and cities to be sure of a livelihood.²

A commission of eminent teachers from Columbia University, which investigated our educational system in 1925, stated categorically that 'the low vitality of thousands of the peasantry, consequent on disease, defective diet and undesirable health conditions, is a yearly drain on Porto Rico, and the loss of vitality is of more account than the cost of maintaining schools in those rural communities which had been overlooked.'³ The commission added that 'a system of suitable rural schools could in a very few years bring about a marked increase in the productive capacity of the rural population'.⁴ In pursuance of this far sighted recommendation and with full awareness of the truth of the statement that 'the academic instruction given to country children did not train them for an efficient life as producers and consumers',⁵ Dr. Juan B. Huyke, Commissioner of Education, reorganized the rural educational system during the school year 1928-29, by setting up two separate administrative units. The object of the *rural first unit*, which covered the first three grades, was to provide peasant pupils with the essential elements of primary education. The curriculum was designed to train the pupil for more advanced academic studies or to prepare him for apprenticeship to a trade in the rural second unit.⁶

The *rural second unit* was devised for pupils who, after satisfactory completion of the syllabus of the first unit, needed to learn a trade to 'increase their earnings and live a fuller and pleasanter life', without interruption of their academic studies. The central school served as a nucleus for this new educational unit. The rural second unit is a central school of a technical complexion, whose essential task is to prepare the pupil for a full and happy life by making

¹ Sixteenth census of the United States, 1940, Puerto Rico: Agriculture, Farms, Farm Property, Livestock and Crops.

² Frederick P. Bartlett and Brandon Howell, *Porto Rico and its Population Problem*, pp. 30, 38-40.

³ *A survey of the public educational system of Porto Rico*, page 200.

⁴ *Idem*.

⁵ *Report of the Commissioner of Education of Porto Rico*, 1931/32, pp. 47-49.

⁶ *Idem* pp. 44-46.

it easier for him to fit into the Porto Rican community. Keeping this ultimate end in view, it aims at the following practical objectives:

1. improving the productive capacity of the island;
2. completing a social and health programme planned in terms of the circumstances of the rural population;
3. improving the home life and surroundings of the rural population.¹

PROGRAMME: INITIAL EXPERIMENTS

The earliest second units were set up experimentally in the following communities representative of the varying agricultural and health conditions of the island: San Anton commune, municipality of Carolina; Sabana Hoyos, municipality of Arecibos; San Antonio, municipality of Aguadilla; Lares, municipality of Lares, and Angeles, municipality of Upuado. Courses were offered in agriculture, domestic economy, carpentry, shoe-making, industrial arts and social works from the fifth grade upwards.²

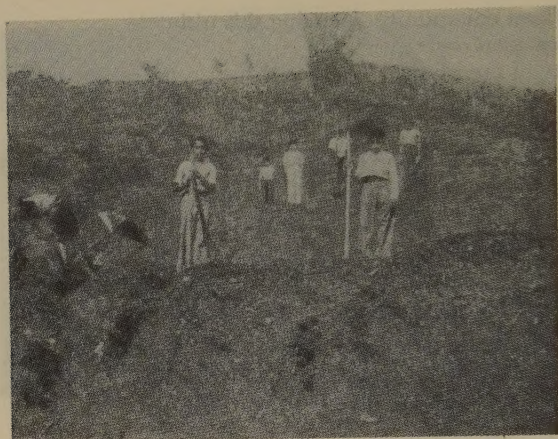
The success was so marked that numerous mayors requested the opening

¹ *Report of the Commissioner of Education of Porto Rico* 1929, page 382.

² *Idem*, pp. 382-383.



Students receiving theoretical and practical training (Second Unit at Unibón, Morovis).



A method for fighting erosion (Second unit at Campo Rico, Canóvanas).

of similar establishments in their own municipalities and offered moral and financial support. Today the island has 133 such units with an attendance list of 16,420.¹

The table given below shows growth per decade:

<i>Decade</i>	<i>Number of rural second units</i>	<i>Attendance list</i>
1929	5
1930/39	83	13,553 ²
1940/49	133	16,420 ³

In addition to the courses mentioned above, the programme today includes sheet metal working, automobile mechanics, pottery, toymaking and electricity for boys, dressmaking and domestic work for girls and a number of handicrafts common to girls and boys.⁴

Agricultural instruction and domestic economy are the marrow of the second unit's curriculum. The agricultural training programme is designed to instil in the pupil the feeling that he is a part of a rural community and that it is his duty to train himself for the proper use of the land's resources and for his own material and spiritual enrichment. Teaching is practical and functional. The student acquires information which fits him to carry out his own agricultural projects with judgment and to assist in the development of his community projects. Under the guidance of the agricultural teacher, non-pupils work as effectively by methods similar to those used with the children.

The fundamental object of instruction in domestic economy is to improve the health and living conditions of the peasant family. In this connexion instruction is given on accommodation problems, the making and care of clothing, nutrition and the preparation of food, the care of children and home sick-nursing.

Although the reform of the system carried out in 1942 made no change in

¹ *Annual report of the Commissioner of Education 1946-47*, page 47.

² Source: Antonio Rodriguez Jr. *The Second Unit and the Rural School Problem of Puerto Rico*, page 62.

³ Source: *Annual Report of the Commissioner of Education, 1946/47*, page 47.

⁴ *Report of the Commissioner of Education of Porto Rico, 1933-34*, page 20.

the essential objects of the rural second unit, it did change its structure by dividing it into two sub-units: an elementary school covering grades one to six and an intermediate school for grades seven to nine. From that date onwards vocational instruction was confined to the intermediate school.¹

SECOND RURAL UNITS AS COMMUNAL CENTRES

An outstanding aspect of the programme of the rural second unit is its social work. Since their introduction these units have been the social centre of the communities. Their classrooms are kept open alike for ordinary academic work and for what are called co-curricular or extra-curricular activities. They are a rendezvous for parents, teachers, children, representatives of the community, the authorities and civic bodies, for the discussion of their own affairs or matters affecting the whole populace; recreational programmes, reading circles and other communal activities are also organized. Official bodies, in particular the Departments of Health, Labour, Agriculture, Commerce and Education, use the second units as a means of bringing public services and information to the dwellers in the countryside.

The social worker or visiting mistress has a task of special importance. She investigates the cases of children either physically, mentally or emotionally maladjusted and suggests—or herself takes—the appropriate steps in each case; in addition she co-operates with the teachers and school authorities in the preparation and execution of social recreational and cultural programmes.²

SUCCESSSES ACHIEVED. PUBLIC ACCEPTANCE

The undoubted success of the rural second units and their rapid increase is due to their having adapted their standards and scope to the essential needs of the country; they have achieved a notable and positive improvement in the living conditions of the Jibaro Boricua. Professor José C. Rosario of the University of Puerto Rico, a distinguished sociologist and an assiduous and alert investigator of our economic and social problems, has very happily summed up the unifying influence of these undertakings. Of the rural second unit, Professor Rosario says that where it exists:

1. It has acted as a nucleus for the growth of small peasant hamlets showing certain signs of progress unknown before, such as rural medical centres, churches and, in some cases, post-offices.

2. The work of some of the teachers in the second units benefits numerous peasant families. I allude to the social worker and the special instructors in agriculture, domestic economy, carpentry and manual work. When real enthusiasm is brought to the work, as in the case of the Padilla second unit, in Corozal, these schools can be regarded as a civilizing influence in the community.

3. The second units acts as communal centres and in this respect do social work of the utmost value.³

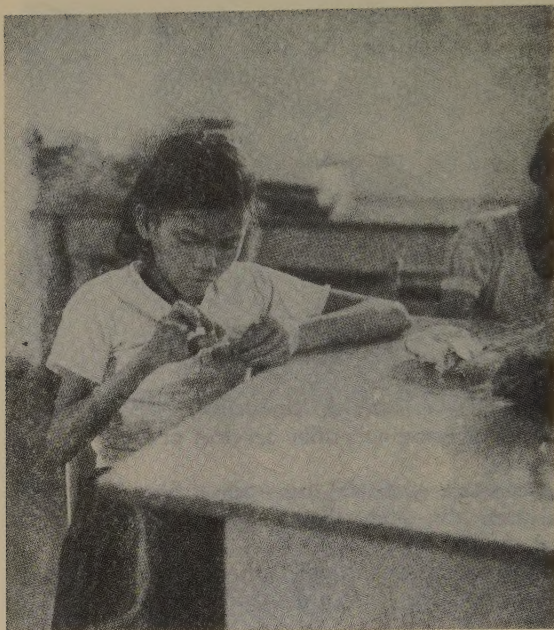
Educators and laymen, both native and foreign, have spoken in the highest terms of this original institution. Ex-Governor Rexford G. Tugwell and Professor Charles F. Reid of the New York City College, said of it respectively that it was 'Porto Rico's finest contribution to the art of education' and 'Porto Rico's real contribution to American education'.

In the view of Dr. Juan J. Osuna, Dean emeritus of the College of Peda-

¹ *Educational Philosophy and Reforms in the Curriculum for the Elementary Schools*. Department of Education Bulletin, San Juan P.R. 1942.

² Antonio Rodriguez Jr., *Op. Cit.* page 58.

³ Antonio Rodriguez Jr., *Op. Cit.* pp. 65 and 66.



Local raw material is used in craft classes (Second unit at Sabana Seca, Toa Alta).

gogics in our university, 'the rural second unit in Porto Rico represents our first successful attempt to bring education into relation with the needs of the community'. Confirming Dr. Osuna's views, Senor Arturo Prado, a senior official of the Department of Agriculture, has stated that 'rural education in Port Rico did not find its true and proper course until the establishment of the rural second units'. Lastly Dr. Cubrine and Miss Lapping of Washington, D.C. consider that 'the rural second unit is the ideal type of school for Porto Rico, because it tackles the island's basic problems at their true source and resolves them satisfactorily'.

The eloquent witness of two out of the thousands who have had the benefit of the rural second units will suffice:

Rafael Hernandez, who graduated in 1925 from the rural second unit in Quebrada Arenas, Toa Alta, gives the following account of his experiences:

'Today I am a farmer. You can't imagine how long I have been dreaming of that. I have three milch cows, a yoke of oxen, a thoroughbred stallion, six piglets, thirty-five hens, two bulls and a horse. We have been lucky ever since we left school.'

Flor Hernandez, a sixty-one year old Jibaro, living in the neighbourhood of the rural second unit in Sabana Seca, Toa Baja, said:

'When the second unit was opened we were all in despair. I borrowed a hundred banana shoots from the centre. Soon I had two thousand, I returned what I had borrowed and sowed the rest. I estimate that at least 700 cords of banana have been sown in these parts; five years ago there were none'.¹

CURRENT TECHNICAL AND ADMINISTRATIVE PROBLEMS. FUTURE PROSPECTS

Among the various problems affecting the work of the second units, there are four in particular which claim the attention of our educators. The first

¹ *Op. Cit.* pp. 68 to 69.

is a matter of material requirements and equipment. Although substantial progress has been achieved as regards the material aspect of these undertakings, many of them are still installed in unsuitable buildings with defective equipment, thus slowing down the full development of the educational programme. Moreover, the experience and recognized methodological talent of our advisers cannot remedy the unfortunate shortage of textbooks and other teaching material adapted to the special circumstances of our social environment.

Even more discouraging are the consequences of the inadequate training of the majority of the teaching staff in the centres. During the recent world war a large proportion of the qualified teaching staff of the island left, thereby creating a serious crisis which compelled the higher school authorities to make provisional or emergency appointments. At the time of writing 58 per cent of the 850 masters teaching in the rural second units lack the academic and professional qualifications required by law.¹ The Department of Education has tackled the problem by making provision for the appointment of the best qualified instructors to these schools.

Secondly, the services required of these school units as social instruments are not as effective as they should be because the majority of the teachers do not reside in the rural communities where they work. The low salaries they receive and the lack of amenities are not calculated to induce them to live there.

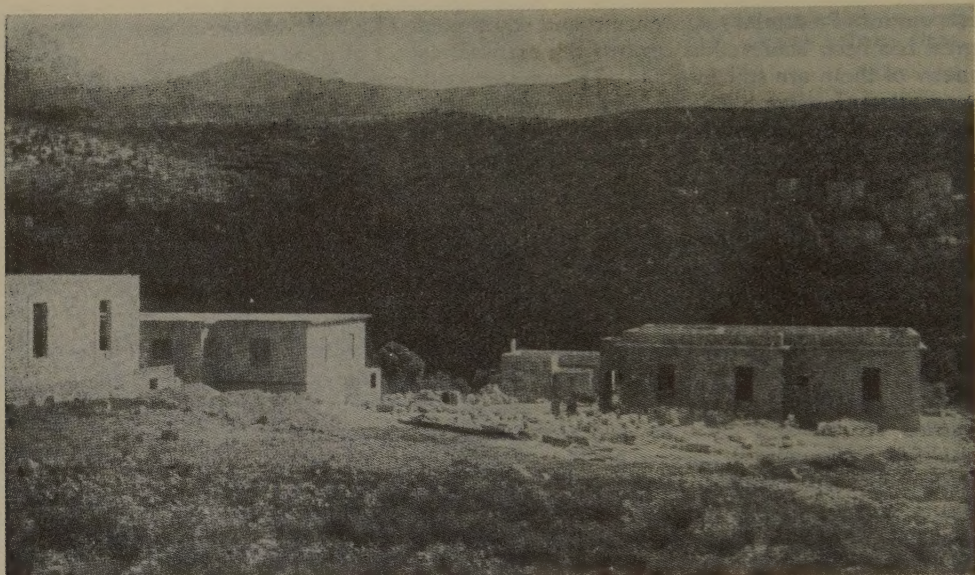
On 5 May 1941, the island's Legislative Assembly approved Law No. 87 instituting *The Teachers' House* under which the State undertakes to supply rural schools most distant from urban centres with a dwelling house and a parcel of land for the teachers' use. The object of this piece of legislation is to 'encourage the training of rural teachers in larger numbers and to improve their professional quality, to settle them permanently in the countryside and thus increase the force of their example among the rural populace, both for greater effectiveness in their teaching duties in the classroom and as a major cultural influence within the rural community'. It is hard to think of a moment more opportune for such legislation, as a teacher having no roots in his community cannot fulfil his social obligations and guide his pupils in the task of adaptation. The law shows that the problem is being tackled with determination.

The final objective should be to secure between these units and urban schools stronger links and a higher degree of integration, to avoid the cultural and social disorientation of pupils transferring either way. In particular, the necessary readjustments for this purpose should be made in the courses of English and social studies where considerations of time-table and the social setting demand different knowledge and methods.

Our second units are not institutions living in the past, although they use it; nor are they intended to cram our country pupils with fragments of culture. Breaking as it does worn-out moulds and abandoning out-of-date techniques, the special atmosphere of our rural second units makes them well adapted to enable the student from mountain or valley to absorb in them those intellectual and spiritual qualities which will make him a fully integrated member of the Porto Rican community.

The rural second unit is an institution novel in conception, that has emerged from our teaching preoccupations and experiments. It is the seed that Porto Rico, the geographical and cultural link between the Americas, waters in the furrows of New World teaching.

¹ Annual Report of the Commissioner of Education 1946-47, page 145.



Houses on the new site, properly spaced so as to allow for gardens.

THE JIBRAIL RURAL FELLOWSHIP CENTRE

by M. KHOURI

HISTORY AND BACKGROUND

JIBRAIL is a small village situated at one of the most beautiful spots in the Lebanon Mountains. It is a typical rural community with a population of around seven hundred, whose inhabitants are entirely dependent on agriculture. This little Lebanese village has a somewhat significant history, and a peculiar background that is common to many other villages. The several centuries during which Syria and Lebanon were under the administration of the Turkish Empire affected not only the mentality of the people, but the whole social structure. In Lebanon, for example, one can usually draw a sharp line between the Muslim and the Christian villages.

The religious persecutions and the faulty political methods adopted by the different imperialistic administrations which directly and indirectly ruled Lebanon, aggravated this religious fanaticism and increased the enmity between these two major religions. This led to the segregation of both religious communities owing to their fear of each other, and thus the one religious-community village became the common social pattern. Jibrail is one of the hundreds of Lebanese villages where the people are all of the same religious group; not only is it entirely Christian, but one hundred per cent Greek Orthodox. We are therefore justified in taking a small rural community like Jibrail as typical of the other villages of Lebanon.

In 1935, Jibrail was chosen as one of the villages where the summer student extension services of the American University of Beirut were to be carried on and was later taken over as a centre for the American Mission Women's College in Village Welfare Service. Students and Faculties of the two institutions united in trying to improve the miserable conditions of the village people, mainly peasants or, what we call in Lebanon, *fellah-heen*. The word 'miserable' is used advisedly as it describes the situation as no other can do. The *Fellah* works many hours a day for twelve months a year merely to get the minimum necessities of life. It is no exaggeration to say that a goodly number of them are not able to earn even their own bread by this perpetual struggle for survival. As for the other social benefits such as medical care, education, decent homes, recreation etc., they are largely luxurious dreams of those whose ambitions and aspirations permit them to dream of such things. The Village Welfare Service had operated for five consecutive summers when the Second World War interrupted its progress. Although this service was fully supported by enthusiastic youth, the movement was not a complete success and did not produce the expected results. It was little more than a work camp that lasted six weeks each summer. These intermittent periods were not enough to establish the work thoroughly and to encourage the people to continue working on programmes which had been started in the summer. Nevertheless this student workcamp movement was the real inspiration for our present permanent project.

SOCIAL PHILOSOPHY

Human beings are human beings everywhere, and although the desires and aspirations of different cultural groups vary greatly, the basic physiological, psychological, and spiritual needs of man are the same. The Jibrail Rural Fellowship Centre aims to meet these basic needs, without the fulfillment of which there could be no hope of further progress. It aims at the building up of human personality; it grows with the growth of the people, and dies with their death. It uses the material world as an instrument for the development of man's happiness, and not as an end in itself. The philosophy of the Jibrail Fellowship Centre is not merely to carry the sick man on its back but to cure him and let him stand on his own feet; it is not to feed the poor but to teach them to overcome their poverty and show them ways of earning their own living; it is not to push the people but to show them how to achieve progress by co-operative effort; and finally it is not an abstract idealistic philosophy—on the contrary, it is much more practical than might be imagined. The Fellowship Centre started from scratch, building its foundations on these fundamental needs, forming its own nucleus and disregarding the disruptive forces of its present environment. The Fellowship Centre fully realizes that its growth will be very slow at the beginning because of the many disruptive factors which have already made their appearance, and which have in the past remained unchallenged. Nevertheless, when the right time comes and under the right growing conditions this nucleus, like all virile living bodies, will double itself, and its guiding philosophy will be appreciated and respected.

THE PROGRAMME

The projects now under way and those we hope to put into practice are numerous and would require a much larger space if they were to be considered in detail. They fall under the following five main headings: fundamental education for teen age boys, fundamental education for teen-age girls, extension

services in the area of which Jibrail is the geographical centre, local leadership training, and public health services.

Education for teen age boys. The teen age group is the heart of every community, be it rural or urban, and without an educational programme that is adapted to their environment, it is impossible to solve their problems and satisfy their needs. Rural teen-agers are always looking towards city life, and its tempting atmosphere. They are for ever complaining of the dullness of their rural environment. As soon as the teen age boy gets some academic education, or finds any opportunity to leave his rural community, he leaves with no hesitation. Therefore a wholesome programme of fundamental education founded on the basic rural issues must be established in the rural areas in order to meet the desires of the teen age rural youth for a more worth-while life. This type of education should aim to make their lives richer in every sphere, cultural, economic, recreational, physical and spiritual. Consequently the curriculum for our teen age boys' school is based on what we consider the ten essentials of the fathers' side in the rural family economy. These ten points are as follows: (1) occupational skills, such as agriculture, horticulture, animal husbandry, etc; (2) academic skills—ability to use Arabic and mathematics effectively; (3) socio-economic-geography; (4) cottage industries; (5) simple building and repair of farm and home tools; (6) health; (7) games and recreation; (8) family relations; (9) emphasis on indigenous rural culture, including history of Lebanon, civics, etc; (10) religion.

Education for teen age girls. The fundamental education programme for girls is based on the same ten essentials, adapted to the mothers' side of the rural family economy. For instance, occupational skills deal with home

Two boys being trained to spray vegetables and fruit trees.





Girls at looms. Cottage Industries are one of the ten points of the fundamental education programme for boys and girls.

economics, rather than agriculture, instead of simple building and repair of home and farm tools, the girls' programme emphasizes child development. A kindergarten is conducted, under the direction of a teacher, as a practice school for the girls and as a service to the village.

Extension services. Since Jibrail is the geographical centre of the Akkar area, the Fellowship Centre intends to extend its service to the thirty or more surrounding villages. This extension service cannot be effectively established in the area until it is well organized in Jibrail, since our method is one of practical demonstration rather than abstract teaching. It is not necessary to give details of our extension programme, since it follows the principles and practices of all effective modern rural reconstruction. A brief reference to our accomplishments is given later in this article.

Local leadership training. One of the main objectives of our Fellowship Centre is to train local leaders who will co-operate in carrying on this project in the real sense of sharing in planning and execution. It is the potential local leader who has lived all his life in the area who can fully understand and appreciate his own and his neighbours' problems. He can be most effective in carrying out co-operative solutions of these problems provided he is trained, faithful, interested and capable. It is therefore the responsibility of the Centre to see that the right kind of local leadership is discovered, trained and given opportunity to join in co-operative solutions.

Public health services. Not only Jibrail, but the whole Akkar area, suffers from the lack of effective medical care and public health facilities. Only the wonderful climate that God has bestowed on this region prevents the



Teen age boys and girls join in a volley-ball game on the playground on the new site.

destructive indigenous diseases from having complete victory. Our Fellowship Centre plans ultimately a region-wide programme for the control of these common diseases, not just as a curative effort but in order *really* to get to the basic roots of the over-all health situation. A very good beginning has been made in the area by the summer work camp of the American College for Women, in Ain Yakoub, five miles from Jibrail, with which the Centre co-operates. With this as a basis we hope to be able to carry out a twelve months' programme in the very near future.

DEVELOPMENTS

Three of the basic projects of the Fellowship Centre have already achieved considerable success: fundamental education for teen age girls, leadership training and extension services. The difficulties that have prevented the carrying out of the wider programme were, and to some extent still are, the time necessary for the supervision of the building programme, the limitations of the budget, the lack of trained leadership, and the hesitation of the rural people of the area to try new things. However, the progress achieved, especially during the past year, has been extremely encouraging. There has been a marked change from indifference to interest on the part of the local residents. Love of the old and fear of the new is a natural sociological phenomenon of simple rural people. Innovations are not welcome until the people can feel, touch and smell the results. But in spite of all the handicaps, the foundations for a successful future have now been laid side by side with the more tangible accomplishment of seven new buildings on the site of the new part of the village.

There has been considerable progress in the training of local leadership especially among the young men. More and more young men from Jibrail and the surrounding area are coming to understand something of the meaning of the word Fellowship Centre as an attempt to unite all willing persons for service of the community. There is already a natural tendency towards selection from this group whereby the capable, honest and efficient individuals are accepted by their companions. The next step will be for these to be accepted more widely in the community. Though the extension services are still in the initial stage, there have been two particularly successful activities i.e., the distribution of better seeds and the control of plant pest and diseases. Those who did not spray their tomatoes lost up to 90 per cent of their crop, while those who did spray lost not more than 10 per cent.

Dr. and Mrs. S. Neale Alter, American missionaries of the Presbyterian Board of Foreign Missions, have been largely responsible for planning and organizing the Fellowship Centre, and for its success so far. The figure, however, depends ultimately on indigenous leadership working in the fullest co-operation with all those who are interested in the rural people of Lebanon. The Fellowship Centre hopes therefore to unite local, national and international leadership in a co-operative search for ways and means to help the people of Jibrail and the whole Akkar area to help themselves to gain a more abundant life by utilizing the best contributions of modern science, technology, sociology and religion.

This year has been a most successful one in the education for teen age girls. The village people are becoming more and more interested in the future of their daughters, and the girls themselves are appreciating more fully this type of education which seeks to bring more abundant life to their village homes. There was also very marked progress in the revival of indigenous rural culture as expressed in folk songs, dances and dramas. These three have found an easy way to the hearts of the people.

The second main feature of the programme is leadership training. Three examples of our attainments in this field during the past year are the work camp of students of the University of Beirut held during the Easter vacation the summer work camp of the American College for Women, and the education of local leaders in Jibrail. In the Easter vacation work camp, students of the department of Sociology of the University of Beirut joined with an equal number of young men from the village in making a road from the main highway to the new Girls' School, on the site of the future model village. In the late afternoons the University students visited the homes of the young men of the village and in the evenings, after all had joined in a sunset meal, village problems were discussed. At the end of the work camp it was generally agreed that the needs of the village were not merely to make two blades of grass grow where one had grown before, but also to bring about basic changes in social and spiritual attitudes.



His Excellency the Minister Clemente Mariani, opening the Seminar. On his left, Professor Lourenço Filho, and on his right, Dr. F. G. Rex, an American educator, on the staff of Unesco.

REVIEW OF THE RIO SEMINAR

by PROFESSOR LOURENÇO FILHO

Closing speech of the Inter-American Seminar on Literacy Campaigns and Adult Education, given by the Director of the Seminar on 2 September 1949.

I AM FULLY sensible of the great honour done me in appointing me Director of this Seminar; but this honour entailed a grave responsibility which I could not have discharged if I had not been able to count on the invaluable support and advice of the assistant Directors, the Group Chairmen and the Brazilian delegate who so loyally carried out the duties of Secretary-General. I refer to Dr. Rex, Dr. Nannetti, Dr. Jardim, Dr. Tejada and Professor Jarussi. We did not come together for a hasty exchange of views but for a detailed study and a careful comparison of our ideas, according to the accepted university procedure. Our work has therefore been of a high standard. With the help of the statistics previously assembled and of our excellent special library, we were able to clarify our ideas on the subject and successfully co-ordinate the work of some hundred educators, school administrators and specialists from every corner of America and other parts of the world.

SCOPE OF THE WORK

The dozens of monographs written here, all to further the cause of popular education on our continent, prove how stimulating our work has been. Further evidence is supplied by our draft 'Handbook of Adult Education', the first account of the living conditions of illiterate or under-educated peoples, and of the factors on which the improvement of their lot depends. Another

—and most important—result was the revival and definition of our ideal of popular education, which will take shape in the proposed Inter-American Institute for Literacy and Adult Education.

Our first task was naturally to assess the magnitude and relative urgency of the problems awaiting solution, with the help of the data supplied by the Inter-American Institute of Statistics.

There are no less than 70,000,000 illiterates in America and 19,000,000 children of school age who do not go to school. This is the critical situation for which a remedy had to be found, firstly by defining its causes. Accordingly, the Seminar began by considering primary schooling in relation to the problem of illiteracy in its historic, social, geographical, economic and political aspects, without, of course, overlooking its educational aspect. We consulted numerous files, monographs and reports and frankly acknowledged the mistakes we educators have made in the organization of training schools, the recruitment of administrators and teachers and the training of leaders.

PRIMARY EDUCATION AND ITS SHORTCOMINGS

Politicians, government departments and the press would do well to weigh the conclusion unanimously reached on this problem: in most countries of Latin America, primary education is not organized in accordance with the community's true interests, and can therefore have no real and lasting value. Over a large part of the continent, primary schooling is not only inadequate, it cannot even fulfil its allotted task of helping to raise the community's standard of living. This explains the people's indifference to it, the poor school attendance and teachers' lack of social prestige and their low salaries.

Although primary education is free and compulsory, according to the law of all Latin American countries, in many of them the average period of schooling is not even two years (in Brazil, for instance, it is less than eighteen months). Once they reach adolescence, most pupils thus return to "functional" illiteracy, and do not use their knowledge to improve their own or their families' living conditions, not to mention those who relapse into illiteracy because books, magazines and newspapers never reach their home.

NECESSITY FOR ADULT EDUCATION

The value of an institution is measured by its creative influence on society. Like trees, institutions are judged by their fruits. If primary education were in keeping with the people's real interests and needs, unbounded enthusiasm would be shown for it, as in all countries where the school is a genuine response to the needs of the people, thanks to the devotion of teachers or the reforms introduced by the more far-sighted authorities.

Our first conclusion is therefore that the school must be given a new lease of life and adapted to the problems of an ever-changing world. The second is that it is no longer enough to teach children. In countries with wide-spread illiteracy, provision must also be made for the education of the countless adolescents and adults who can scarcely be called alive, unconscious as they are of the gravity of the hour, incapable of personal effort and ready to be led astray by easy solutions.

In other words, educators realize that education cannot be considered apart from social conditions, that neither teachers nor government departments can, unaided, guarantee the efficacy of an educational system: education can be no more than the expression of the cultural aspirations of each people. To infuse new life into the schools of educationally backward countries,

educational methods must be revolutionized and cultural facilities provided for adolescents and adults.

IMPORTANCE OF THE CAMPAIGNS

Primary education must therefore draw its inspiration from the people, from the social and moral forces which initiated the educational movement and which should guide it, if it is to fulfil its true purpose. In practice, this inspiration must come through adult education. It is necessary not only to influence mature men, but above all to teach or remind them of the principles of the fundamental education they have not received or have forgotten and without which, as Unesco has stressed time and again, they cannot play their full part in social life.

We all agree that such an undertaking necessarily involves a first stage which might be termed the heroic or 'shock treatment' phase. In all countries, particularly those where the problem is acute, the government and people should join in 'campaigns' to win public support for the work of social reconstruction, which is more than mere schooling, its success depending on the concerted efforts of many sectors of society.

Such a campaign may seem to the simple-minded to be no more than a literacy drive. It will frequently be necessary to stress this straight forward, practical aim, for even the least learned cannot fail to appreciate the advantages of reading, writing and arithmetic in facilitating social relations. But once this result has been attained, we shall merely be in possession of an instrument, rudimentary though it is, enabling us to carry our action much farther. These campaigns are but the first stage in arousing the conscience of the people, politicians, government officials and even the teaching profession in each country. This heroic stage should immediately be followed by more far-reaching and complex work to prepare for a normal educational system, properly organized and financed.

The truth of these remarks is borne out by the reports of the Seminar's various working parties. After studying every aspect of adult education campaigns, we would all state without hesitation that it is not enough to teach people how to read; we must go further and show them how to keep healthy, conserve natural resources, improve their work, employ their leisure wisely and to play their part in public life: in short, they must be prepared to live with their fellow-men in accordance with the highest principles of democracy.

This task takes us far beyond the narrow confines of the school. We must see that the cultural movement takes root in the people itself, and by people we mean the learned and the ignorant, the governing classes and the governed, men and women, old and young, in short, all who take any part in the life of the community. Unlike those of a different creed, who would resort to coercion, violence and terror, the American educators assembled here believe that more enduring results may be obtained through understanding and setting the people an example; this is the principle of militant democracy which, not content with expressing political formulae, penetrates the very soul and customs of the people.

BELIEF IN THE HUMAN SPIRIT

Our conclusions are thus based on our unflinching faith in the power of the human spirit, without distinction of race, sex, religion and social or economic status. They are also inspired by a profoundly Christian spirit of social sympathy and human brotherhood and, even in their purely technical aspects,

vest the problem with a 'political' significance, in the highest sense of the word.

It is not surprising, then, that the solution we propose for each country's internal problems, for raising the educational and living conditions of the people, should be dictated by a deep sense of our fraternity, transcending national frontiers. Throughout this Seminar, each member has considered the problems of others as if he were dealing with his own particular country. America has here been regarded not as a geographical bloc, nor as a group of peoples with common economic interests, but as an historic and cultural unity, striving towards the same goal of understanding, harmony and the betterment of mankind.

In this connexion, it is highly significant that certain countries, where illiteracy is no problem, have here been represented by specialists who have shown great understanding and consideration, and have at all times been ready to give of their best in order to hasten the dawn of the new world of our dreams. From the United States of America, we have the offer to put President Truman's Fourth Point into practice; the Argentine Republic places its teachers and experts on the training of teachers at the disposal of its needier neighbours. Brazil, though faced with the difficult problem of organizing popular education, is awarding fellowships to students from other countries to attend its educational research centres. And among the non-American countries, Great Britain, whose people are so splendid an example of democratic dignity, is offering us the technical assistance that is so valuable for a vast campaign of adult education.

THE INTERNATIONAL AGENCIES

However deep our convictions, however capable or influential any one of us may be, we must realize that individually we can achieve little. Our strength is the ideal for which we stand, an ideal embodied by the international agencies which have contributed so largely to the success of this Seminar.

Our thanks are due to the United Nations Organization, the United Nations Educational, Scientific and Cultural Organization, on whose initiative we were convened, the Organization of American States, the International Bureau of Education and the Brazilian National Commission for Unesco, whose unstinting support has been a proof of their idealism.

CONCLUSION

H.E. M. Clementi Mariani, Minister for Education and Health, has instructed me to tell you how gratified the Brazilian Government is to have been able to facilitate the work of the Seminar. On behalf of the Brazilian delegation, I should also like to express our thanks for the assistance we have received from every member of the Seminar.

Lastly, we must thank H. E. the Governor of the State of Rio de Janeiro for his generous assistance, the staff of Unesco and the Organization of American States and others to whom the success of the Seminar is so largely due, in particular, our Secretary-General, Professor Francisco Jarussi.

My friends, after our group has broken up, our efforts should not become dissipated; they should be yet more intense. When we resume our daily task in our several countries, we must be as the sower of the parable, sowing in others the seeds of faith, courage and human understanding. May we work with steadfast confidence.

I declare the Inter-American Seminar on Literacy Campaigns and Adult Education closed.



Doctor 'Anti-illiteracy' prepares his 'patient' for a new lesson.

A SYSTEM FOR ADULT EDUCATION IN INDONESIA

by J. C. NOTEBAART

INDONESIA presents extraordinary difficulties to organizers of any system of adult education.

To begin with there is the very great number of languages, some of which are spoken by millions of people, others by only a few thousand or a few hundred. Although there is an official general language, Indonesian, the greater part of the illiterates, amounting to about 31.000.000 people, do not understand that tongue in the least.

Thus a system for adult education—if it is to be effective—should be based on and find its roots in the people's mother-tongue. This however will have considerable financial consequences.

Adult education is one of the important items in the programme of Indonesia, as an inevitable result of the swift development of this new state. In every part of Indonesia adult education has the highest priority. There is no time left for introductory experiments. The most practical course has been to start

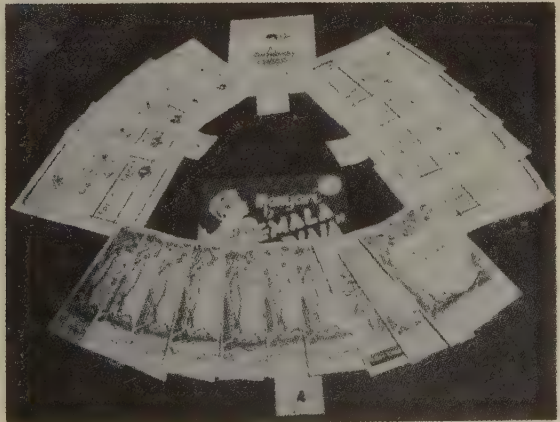
work immediately on a sound basis, while taking every care to allow opportunity for experiments which might lead to improvement of the original methods.

The experience of various countries abroad during recent decades has been combined with the results obtained in a temporary literacy campaign in East Java from 1938 to 1942; these have provided a foundation on which the present system is based. The system consists of:

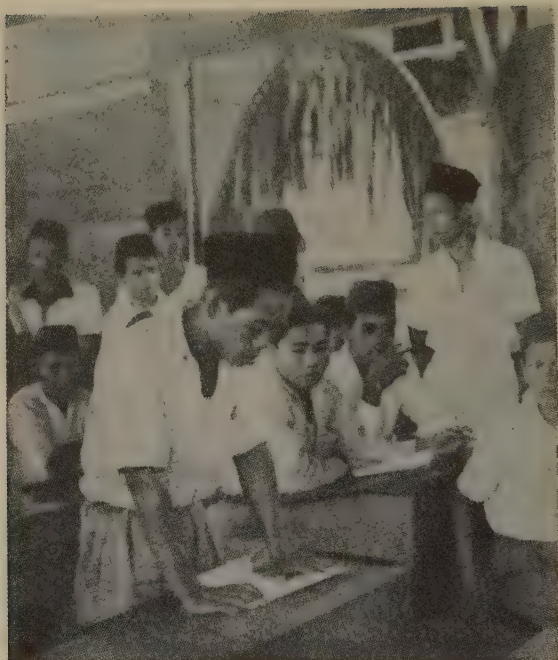
1. Spelling period (1st grade);
2. Local post-illiteracy (2nd grade);
3. General post-illiteracy (3rd grade);
4. Connexion with and continuation of the public services specially planned and carried out for improving the prosperity of the people, such as irrigation, agriculture, hygiene, road building, afforestation, reclamation, etc. (4th. grade).



The symbol of the fight against illiteracy.



1. Primer (1 booklet).
2. Local post-illiteracy for males (24 booklets).
3. Local post-illiteracy for females (24 booklets).
4. General post-illiteracy (500 booklets).



A new-literate expresses his gratitude after just having received his certificate.

THE SPELLING PERIOD

This period lasts for three months, during which the illiterates are to learn reading and writing.

The greater part of the illiterates are peasants and so in general do not have the regular working hours that factory labourers have. Very often they could not even manage to attend a spelling course regularly, so that an absentee rate of 50 per cent was normal. To meet this difficulty special primers were composed for the so-called 'illiteracy doctoring system'. In this system the fighter imitates a doctor by having consulting hours. During these hours the illiterates have to be present. First a minor examination of previous lessons takes place, then the 'patient' is prepared during a few minutes for the new lesson, which he may finally acquire completely by self-activity.

At the same time experiments are being made in various parts of Indonesia with the 'each-one-teach-one' method.

As soon as the spelling period is at an end the candidate undergoes a simple test which serves simultaneously as a public lesson. Thereupon the new-literate is presented with a certificate to show that he can read and write and that he has obtained the right to attend the local post-illiteracy course.

THE LOCAL POST-ILLITERACY COURSE

As these courses are held mainly in or near the locality where the new-literates live they are termed local.

The purpose of this stage is to extend the limited knowledge of these simple people. The immediate object of the local post-illiteracy courses is teaching to read and write easily, so that more advanced books will not cause any difficulties.

Since it is advisable to use reading matter that is related as closely as possible to the *milieu*, four series of booklets have been issued, viz. for the towns-people, the rural population, the mountain people, and the coastal population. Each series consists of six successive parts for men and six others for women.

The matter in those booklets is woven around the family. Starting from the completely familiar environment of the home, the student gradually becomes acquainted with all those aspects of life, which, only vaguely known initially, are yet of great importance to every member of modern Indonesian society.

When the local post-illiteracy period is over, the new-literates receive a certificate stating they have followed the course and that they have acquired the right for themselves to fight against illiteracy.

THE GENERAL POST-ILLITERACY COURSE

Because of its broader Indonesian and international character, this stage of post-illiteracy is called the general period; the typically regional character of the previous stage is dispensed with.

The main object of the course is to raise the standard of the people's education to a level where they are able to read an ordinary newspaper or book without difficulty. For this purpose some 500 booklets have been composed, covering altogether 22 aspects of the social life of the people. The booklets are divided into grades of increasing difficulty and lead the new-literates gradually to the common library for the people.

The arrival of the books in the village is a great event and provides the opportunity for creating a cultural centre. The books are housed in a simple little building with room for a modest library, a reading-desk and a corner for writing. Articles such as postage-stamps, pens and ink are put at the people's disposal. Apart from being used for formal instruction, the cultural centre serves for meetings and the showing of films, for drama, singing and declamation societies. It is also useful as a place where every kind of information can be obtained, on hygiene, agriculture, irrigation, and so on. In short, it is hoped that the centre will become the focus of village culture.

During the period of local post-illiteracy, the new-literates have at their disposal a newspaper written specially for them. Three different newspapers, graded in difficulty, will help the new-literates to become readers who are able to criticize when the opportunity arises, so that at the end of the general post-illiteracy period they may turn to a normal newspaper.



A piece of music in a cultural centre in Eastern Borneo.

PUBLIC SERVICES

Plans are projected in such a manner that public services, such as the agricultural information service, the veterinary, irrigation and public health services, etc., can further their activities on the foundations laid by the literacy courses.

COURSES OF GENERAL KNOWLEDGE

New-literates who wish to study beyond the stage reached during the period of general post-illiteracy will be enabled to do so by means of courses of general knowledge. These courses are prepared especially for adults and give instruction in arithmetic, writing, child-care and many other subjects.

CONCLUSION

Adult education has another task to accomplish besides supplying general education for the people. Indonesia's swift development requires that the youth in the next few years should attend schools in ever-increasing numbers. In backward areas the youth is being taken to the twentieth century school from a primitive rural society. An inherent conflict between societies may be reflected as a conflict between the older and the younger generation, but in Indonesia the latter conflict can be avoided to a great extent by well-organized post-illiteracy training which will bring the older people closer to the younger generation.

Djakarta, Indonesia.

August 1949

A course in the fight against illiteracy



FUNDAMENTAL EDUCATION FOR AMERINDIANS

by PEDRO T. ORATA

EDITOR'S NOTE: *The first part of this article appeared in the October 1949 issue of the Bulletin. The author there described the background to the work of the Education Division of the U. S. Indian Service, and reviewed curriculum development. At the end of the first part we printed the bibliography to which reference is made throughout the article. Readers are requested to refer back to the earlier issue for this list.*

TEACHERS IN TRAINING AND IN SERVICE

EARLY in the new programme emphasis was placed upon the proper preparation and in-service education of staff. Regional summer schools were established for this purpose. The schools were organized in the form of work shops where the teachers were given opportunities to re-examine the problems of Indian education and, in the light of their thinking, to evaluate their own procedures and practices. The Reservation Superintendent and those occupying key positions in the central office were called upon to discuss with the teachers problems of vital consequence that affect the other branches of the Service in relation to education. The six-week summer school in Pine Ridge in 1937, for instance, included the following:

1. A series of conferences led by Mr. Beatty, the purpose of which was to explain and examine the point of view which he advocated for the re-orientation of Indian education. It was not a lecture course, but rather an open forum where the teachers were encouraged to raise questions and even doubts, in the light of their own experiences.

2. A class in arts and crafts under a competent Indian craftsman who placed emphasis particularly on the contributions of the Sioux tribes in the Dakotas. The teacher-students were taught Indian handicrafts.

3. A class on Indian Reservation Problems led by Superintendent Roberts of the Pine Ridge Reservation, assisted by chiefs of divisions—those in charge of agriculture and irrigation, social work, health, and similar activities.

4. During the entire summer session the teacher-students were divided into working committees to produce teaching material or revise existing courses of study. Before they left for their respective posts they had tentative plans for the coming year in the making of which they had had a share.

GUIDANCE, COUNSELLING AND PLACEMENT OF STUDENTS

The guidance, counselling and placement of students and graduates is a paramount concern of the Indian schools. From the first grade up students are given personal attention by the teachers who see to it that their problems are taken up with them or their parents and the solutions are undertaken with their full co-operation. Committees are appointed to attend to special problems. There is, for example, a students' loan committee, consisting of representatives of the reservation school personnel and of leading Indians. This committee works on a twelve-month period and keeps a cumulative record of the students who are given loans for higher education; it also follows the records of students in school who may be considered for loans, and pays particular attention to their special qualifications. The students are advised

on the type of job in which they will most likely succeed and the type of further training that they may need, but the matter of final choice of a career is left to them. (5:18,26),

During the vocational training period students are given the opportunity to practise the skills under the conditions of real life so that they may become self-reliant, confident, proficient, and experienced in the phase of the work to which they are giving their major attention. Wherever possible, adults are given similar training and guidance. In every school where vocational training is given, the faculty are held responsible for the placement of the graduates in positions where they can be of most value and where they may get the most for their work. (4)

EDUCATION OF ADULTS AND OUT-OF-SCHOOL YOUTH

In a wide but real sense the whole of the Indian Service is endeavouring so to educate the adults and the out-of-school youth that they may increasingly be able to manage the affairs of their respective reservations. In a project in one of the communities on the Pine Ridge Reservation more than ten years ago the attempt was made directly to implement the Indian Re-organization Act, the purpose of which, as indicated, is to enable the Indian people to support themselves and to assume leadership in their government. In one year of work with adults it was possible to lead them to take an active and increasingly leading part in major community activities— farming, home improvement, recreational activities— in order that they might be aware of and do something to solve the following problems (7: 11: 211-14):

1. *Economic self-sufficiency*
 - a. Develop sense of responsibility to earn their own living;
 - b. Lead them to realize that they can improve their economic status;
 - c. Give them training to exploit their own resources.
2. *Self-government*
 - a. Develop sensitivity to community problems as their own problems;
 - b. Give them opportunities to discuss those problems and to offer and take responsibility for their solution;
 - c. Promote confidence in their ability to think.
3. *Better housing*
 - a. Lead them to realize that it is their responsibility to improve their own homes;
 - b. Lead them to desire to make the improvement themselves;
 - c. Develop confidence that they can do it;
 - d. Give them the training to do it themselves.
4. *Better health*
 - a. Lead them to appreciate the services of the medical staff and to give up unscientific beliefs and practices;
 - b. Lead them to realize that the promotion of health is an individual and community responsibility;
 - c. Give them the facilities for and training in the use of simple first aid remedies.
5. *Preservation and improvement of native culture*
 - a. Lead them to realize the practical value of arts and crafts;
 - b. Give them training in art and craft work.

In one of the communities on the Navajo Reservation, before the war, shops for adults were provided where they could repair their own wagons and farm implements. From September 1940 to January 1941, a total of 825 adults in the town of Tuba participated in shop work. 'One man who lives nine miles

west of school broke a wagon wheel. He didn't have any way to get in except by walking. He rolled the wheel in, replaced a couple of spokes, shrunk and reset the tire, and then rolled it back home'. (1 : 280).

HUMANIZING INSTITUTIONAL LIVING

Before the new programme was instituted Indian children were kept in dormitories for six months or one year at a time with the most rigid rules and regimentation according to White American standards. The pupils were taught to do things and behave in ways that were foreign to their homes and communities. The result was that when they returned home they were *in* their community but *not of it*. Their education had made them unfit for the life they were to live after leaving school.

The system was changed so that the pupils who lived in dormitories were given a home-life atmosphere that was clean and adequate. They were encouraged to exercise their ingenuity in fixing their rooms to suit their tastes. Instead of dormitories for 200 or more children, 'cottage dormitories' for two dozen or less have been arranged. Each dormitory is under the management of a competent and sympathetic adult called 'house mother' whose function is chiefly guidance and counselling. Children are accommodated in smaller rooms where four or fewer may live comfortably. Family councils are held frequently and the pupils are given a chance to voice their opinions about the food served or the treatment given them and to feel that they are being treated as persons (1 : 228-246).

THE LANGUAGE PROBLEM

Former Commissioner Collier once remarked that the Indians are as much entitled to their language as any group of people. The present policy is to respect the native language, no matter how under-developed it may be. There are some three to five hundred different Indian dialects in existence today which stem from some eight or nine 'root' tongues. The present practice has two objectives: first, to preserve the native languages as a symbol of cultural importance; second, to introduce English as a second language of vital usefulness to the Indian of today. Contrary to the belief of many older teachers in the Indian Service, with this policy there has come 'the beginning of that increased pride in race and culture, which is necessary for worthy achievement. And for the moment, what is equally important, *an increased desire to learn English*. Tribes which have resisted the use of English within the tribal group are today requesting instruction in English for adults as well as children'. (1 : 174).

In conformity with this policy, textbooks in reading are written in the two languages, English and Indian, the result being that the Indians are becoming a bilingual people. Experience in the Indian Service seems to encourage those who are confronted with the same problem, most especially the colonial powers—Great Britain, France, Holland, Belgium, and the United States. Paradoxically enough, it seems that two languages are more easily learned because the learner wishes to learn both of them, than one, English alone, which he feels is being imposed upon him to the neglect and prejudice of his mother tongue.

INDIAN CULTURE

The preservation and improvement of Indian culture is foremost in the new policy. Special studies (12-15) have been undertaken the results of which have

been published for the use of teachers and students alike. *Indians Yesterday and Today*, published in 1941, was the result of a series of radio programmes relayed to classrooms throughout the nation in order to give basic and authentic information about the origin of the American Indian, Indian contributions to American culture, history of Indian-White relations, Indian industry, education, health, agriculture, and arts and crafts, and Indian reorganization. Dr. Ruth Underhill, specialist on Indian anthropology, has published well illustrated source studies of *Indians of the Pacific Northwest*, *Workaday Life of the Pueblos*, *The Northern Paiute Indians of California and Nevada*, *The Indians of Southern California*, *The Papago of Arizona and their Relatives in Pima*, and others. *The Story of the Blackfeet* and *Blackfeet Crafts* by John C. Ewers complete the list known to the present writer.

An Indian Arts and Crafts Board encourages the revival of older crafts and the introduction of newer home crafts. Students showing special aptitude in art and craft work are given the same opportunity for specializing in these fields as in others. In order to promote and systematize the development and sale of products of Indian arts and crafts the formation of arts and crafts associations is encouraged. The associations may purchase a materials then sell them to Indian craftsmen who are in turn encouraged 'to produce for sale only articles of the best workmanship'.

EVALUATION OF INDIAN EDUCATION

In the final analysis, one wants to know the results of the programme which has been in operation for more than ten years. Is the programme effective and adapted to Indian needs? To answer this question, at least in part, the Indian Service engaged a group of experts in evaluation from the University of Chicago led by Dr. Shailer Peterson. The group gave a variety of tests which tended to establish certain facts about the achievement of the pupils in the Indian schools as compared with the achievement of pupils in non-reservation schools. In summarizing the three-year testing programme, Dr. Peterson (819) said:

'The data available proves that Indian education has progressed far towards its goals, which combine an understanding of and respect for the Indian's own tribal lore and art with the full educational opportunities of the non-Indian.'

On the problem which is often raised—whether the emphasis placed upon vocational training and home economics weakens the academic achievement of the students in the Indian school—Dr. Peterson (8:18-19) stated:

'A survey of Indian school schedules indicates that a considerable amount of the student's time in Indian schools is spent in vocational training. However, the fact that the Indian students perform as well as they do on the standardized tests in the academic subjects, makes it evident that this special training has not penalized them and may even have contributed to a relatively high level of achievement... The Indian child is in school primarily for the purpose of learning how to earn a living after graduation. In view of this, it is particularly significant that he is not only receiving practical vocational training but also is learning academically just about as much as is learned by the public high school student who devotes full time to academic work.'

It is unfortunate that the programme of evaluation did not include an assessment of the vocational objectives. However, there is ample evidence elsewhere that emphasis on vocational training and citizenship produced results which are as pronounced as those revealed by this survey. Reference was made above to the work with adult Indians and out-of-school youth in the fields of

earning a living, self-government, better housing, better health and the preservation and improvement of native culture. The results of the year's programme were carefully appraised by methods which centred attention upon how the people's performance improved in practical situations that confronted them. Expressed in precise and wherever possible, objective and measurable terms, the results of the study have been summarized briefly as follows:

After working with the Indian people for nearly a year and watching their reactions to specific, specially unsupervised situations, we cannot help feeling that many of them (1) have discovered their inherent capacity for supporting themselves and managing their own affairs; (2) as a result of this discovery have gained some measure of confidence in themselves; and (3) have as a consequence of their numerous and successful participation in doing the things themselves which are ordinarily done for them, made a good beginning in still more and wider areas of participation in matters that concern them as a people, directly or indirectly. (7:11:216)

The Indians in Kyle cannot be bossed around easily as before. They are likely to raise an objection to any plan in the making and execution of which they had no part. They are likely, also, to have a sense of pride in their work and confidence in their ability to do things themselves that have been done for them in the past by the officials. Their outlook on and attitude toward life and with reference to the Indian problem could not have remained unaffected by a year's work of thinking, planning, managing and evaluating the results of our joint effort. (7:1:476).

CONCLUDING REMARKS

Throughout this discussion the emphasis was placed on the methods of fundamental education and manner in which they have been or are being applied in the U. S. Indian Service. There is ample evidence that the Service is pioneering successfully and that its future development and tendencies are worth watching carefully. Those interested in fundamental education will wish to become familiar with the work of Mr. Beatty and his staff, either by making on-the-spot observation or at least by examining the publications of the Indian Education Division, some of which are listed in the bibliography.

Admittedly, the *per capita* school expenditure in the Indian Service is probably much higher than the corresponding figures for under-developed areas which are not enclaves. The cost of printing books alone, to say nothing of the salaries of special supervisors, may well be beyond what is now being provided in other parts of the world for similar items. Nevertheless, with the right leadership and point of view, it is usually found that much more could be done with even the limited amounts now available. It should be emphasized that fundamental education must operate with existing funds and adjust its programme accordingly. It is hoped that funds will be increased as the people acquire more effective educational programmes, with increased emphasis upon the vocational and citizenship objectives.

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- 16m. U.S. Indian Service. Pamphlet 1. *Questions on Indian Culture.* Washington, D.C., U.S. Indian Service, 1949, 15 p.
- 16n. Warne, William E. *The Public Share in Indian Assimilation.* Washington, D.C., U.S. Indian Service, 1948, 15 p.
- 16o. Warne, William E. *Indian Rights and their Protection.* Washington, D.C., U.S. Indian Service, 1949, 20 p.
- 16p. Zimmerman, JR., William. *A Year of Opportunity.* Washington, D.C., U.S. Indian Service, 1949, 19 p.

TEXTBOOKS FOR INDIAN SCHOOLS

A. Navajo Series

- 24a. Morgan, William and Others. *Coyote Tales.* Washington, D.C., U.S. Indian Service, 1949, 53 p.
- 24b. Thompson, Hildegard. *Navajo Life Series. Pre-Primer.* Washington D.C., U.S. Indian Service, Rev. 1944. 23 p.

B. Pueblo Serie

- 25a. Clark, Ann. *Young Hunter of Picuris.* Washington, D.C., U.S. Indian Service, 1943. 56 p.

C. Sioux Series

- 30a. Clark, Ann. *Sioux Cowboy—Primer.* Washington D.C., U.S. Indian Service, 1945, 48 p.
- 30b. Clark, Ann. *Singing Sioux Cowboy—Reader.* Washington D.C., U.S. Indian Service, 1947. 114 p.

D. Hopi Series

31. Kennard, Edward A. *Little Hopi.* Washington, D.C., U.S. Indian Service, 1948, 201 p.
32. Kennard, Edward A. *Field Mouse Goes to War.* Washington D.C., U.S. Indian Service, 1944. 76 p.

SHORT RUN REPRODUCTION METHODS

—SILK SCREEN PRINTING—

by CLIFTON ACKROYD

MOST teachers and thinkers who wish to influence others, from time to time require copies of some graphic material—a chart, map, diagram or picture—or some piece of writing. Often the demand is small, though real in its importance for the spread of the particular message. For this reason, normal printing methods are too expensive: such methods are not economical under 1,000 copies at least; when illustration is required, only still larger quantities can really carry the initial cost of line blocks, and half-tone and colour process printing require proportionately higher quantities to absorb initial costs. What then is to be done when only a small number, say 25 to 1,000 copies, of an item require to be reproduced?

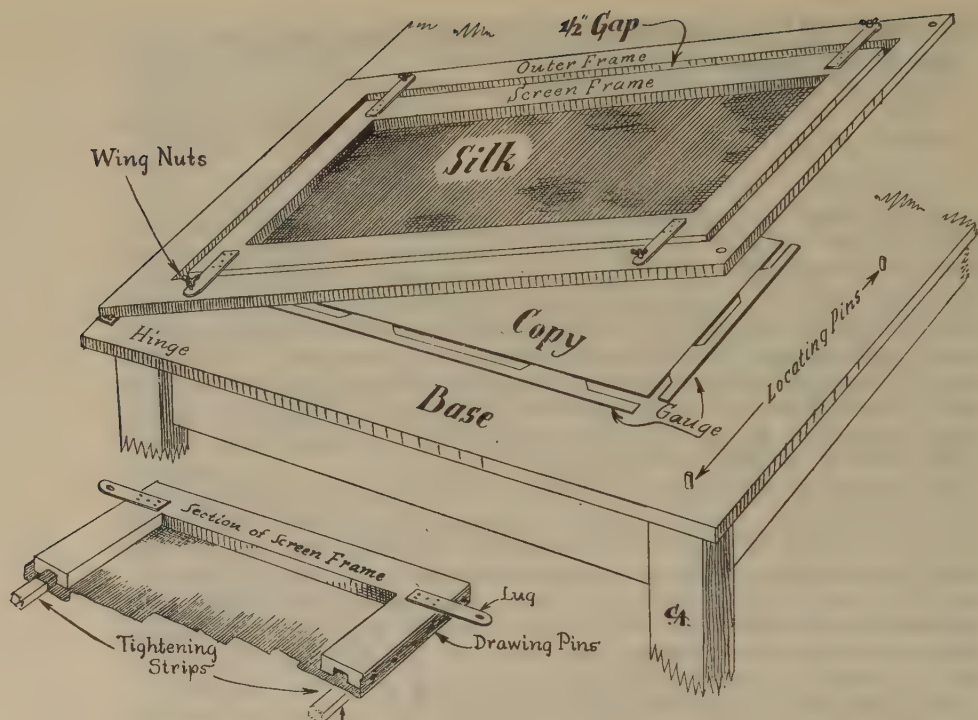
The value of duplicators printing from stencils cut on a typewriter needs no commendation here. Their convenience and economy is so well proven that they are used even for long runs in competition with more orthodox printing methods, where the quality of printing is considered adequate. The snag is the initial cost of the machine; in the case of the most modern duplicators, this cost is very considerable. But anyone fortunate to obtain a simple and inexpensive flat-frame duplicator can, with care and patience, produce the copies he wants, and with considerable flexibility as to matter reproduced.

Particularly for complicated diagrams, photographic copying has much to commend it. But the cost factor does not fall as the number of copies taken increases, so this is essentially a very short run process. Many readers will have a camera, and have the use of an enlarger, in which case it is possible to exploit this method of copying for runs up to, say 50 or 100 copies.

Probably the most promising short run method is the silk screen process, because it is possible for the normal handyman to construct the necessary plant from fairly readily obtainable materials. It should be understood at once, however, that very small typographical matter cannot be reproduced in this way using hand-cut stencils; the smallest lettering reasonably possible would be about 1" deep. Bold technique is demanded by the medium, but this is all to the good, as display materials are always improved by simplicity and strength of presentation.

The system consists, in principle, of a screen of silk resting on a solid surface; to the under side a stencil of non-porous material — portion of the design not required to print — is affixed, i.e. the screen is blanked-off where required. The material to be printed upon is placed between the screen and the solid surface: paint is passed across the top of the screen and goes through the unblanked portions of the screen on to the material below. This material is then removed and set aside to dry. Later it may be printed upon again with different stencils in any number of colours, though here simplicity of design applies equally; fewer colours are both economical and effective. Apart from the number of colours, restraint in the use of any individual extra colour makes for sound balance in design.

Now to practical details. First, size. The most useful size for operating a single screen is probably 20" × 30" (50.8 × 76.2 cms.), taking the paper size, Double Crown. It is economical, if smaller sized material is required, to print two or more different items together (e.g., two Crowns 15" × 20" —



38.1 × 50.8 cms.) or four Crown folio (10" × 15"), and cut them down after drying.

The screen is best made from 2" × 1" (5 × 2,5 cms.), timber used flat, with strengthened corners. The printing area is the inside measurement of this frame. Across the underside the silk is stretched; Miller's Bolting Silk of 120 mesh is the best general purpose material. Methods of achieving the necessary high tension on the silk vary: one of the best is to groove the frame and insert strips thus pressing the already taut silk into the groove.

This screen needs an outer frame, with 1/2" clearance. Lugs on the screen frame should have holes to fit over bolts on the outer frame; wing nuts simplify assembly and dismantling. As the outer frame must be raised and lowered each time a new piece of material is printed, it is convenient to hinge this to the base board (a smooth-topped table or bench about 32" (81.3 cms.) high for comfortable working) at its back edge.

The crux of the matter, of course, is the stencil. The simplest of these is made of paper—M. G. poster 120 lbs. is suitable, though some operators use greaseproof. As the thickness of paint deposited equals the thickness of the paper stencil, the paper must not be too thick. Draw the design on the paper, then cut it out with a sharp knife, using a metal ruler for straight edges. Some parts come quite loose—centres of circles and such letters as B and D. Next the stencil is laid on the screen base with all loose pieces in correct position; the screen is lowered on to it and glue is put through the screen with a sharpened match-stick in enough places to ensure adequate sticking. On printing, the paint will quickly complete the adherence of the stencil. The edge of the

stencil paper is attached to the screen frame with gummed strip to ensure that paint cannot escape other than through the unblanked portions of the stencil.

In order that the design shall print in the desired position on each copy, gauges must be provided on the base board. The simplest type is made of two strips of the same material as the copy, glued in place so as to enable one side and one end of the copy to be accurately placed in position. If required, more elaborate gauges may be bought, some of them spring-loaded so that they accommodate themselves to varying thicknesses of copy. When more than one colour is being printed, the exactness of position each time (known as correct register) becomes very important; the gauge strips should each have two projecting contact points; thus by placing the copy against all four points, accurate positioning is ensured. The hinges on the frame will also admit of some play, so it is wise to locate the outer end of the frame—pins in the base keying into holes in the frame do this efficiently.

In printing the colour is squeegeed across the top of the silk. Squeegees may be made by clamping $1\frac{1}{4}'' \times 1\frac{1}{2}''$ rubber strip between two pieces of wood, leaving $3\frac{3}{4}''$ or so of rubber protruding. The edges must be dead straight and sharp, and at intervals re-sharpened with a keen knife and steel rule; a rounded squeegee means blurred printing.

Though paints range from water-colours to cellulose paints for special purposes, the normal material is oil paint, and it pays handsomely to use high quality materials. These will overprint and remain colour-true; their gloss will be consistent, or if matt finishes are used, overprinted colours will not be found to dry glossy as cheaper materials sometimes do.

On completion of screening, the stencil should be stripped off the silk, and the latter cleansed of all vestiges of paint. Turpentine substitute is the best cleaning medium. Cleaning can be a long operation, but it is essential with silk, which is too expensive to waste. A cheaper alternative material, which, though coarse-meshed, is quite satisfactory with paper stencils, is organdie; it may be discarded after removal of the stencil, or, if cleaned carefully, even stored away with its stencil in position for re-use. Organdie once slackened, however, cannot be re-tautened, whereas silk will tauten under alternate application of hot and cold water.

In so short an article only the simple principles of the subject can be covered. Refinements of the apparatus are possible: counterweights to retain the screen in the open position; screens which lift bodily at all four corners; foot-operated lifts. Furthermore, screens may have adjustable hinges to facilitate printing of thick materials like plywood, metal, glass, plastic sheeting and fabric: the secret is to have all-round gauges of equal thickness to the stock being printed. Again more elaborate stencils may be used permitting of fine work, and even of half-tone effects. The following longer works can be recommended: *Practical Silk Screening*, H. K. Middleton, and *Silk Screen Process Production*, Hiatt and Clemence, both published by Blandford Press Ltd.

NOTES AND RECORDS

RURAL WELFARE

Two recent publications of the Food and Agriculture Organization should be in the hands of everyone responsible for, or interested in, fundamental education. FAO is a scientific and technical organization concerned with basic needs—with food production—and its rural welfare work is characteristically down to earth.

ESSENTIALS OF RURAL WELFARE

Is a short analysis showing how a coherent programme can be built up to suit the needs of rural people. It is written in a theoretical form which will serve as a valuable outline for courses in teacher-training colleges. The greatest problem in rural welfare is that of leadership, and appropriately the second book is: *Training Rural Leaders: Shanton Bailie School, Kansu, China.* (FAO, Washington or Sales Agents. 136 pp. \$1.50). The study was made at first-hand; it combines a remarkable amount of detail with a critical appreciation of the deeper purposes of the school's work. The decline of the Chinese industrial co-operatives has given evidence enough of the need for an education which provides rural leaders—men and women who will live in the villages, applying their knowledge of modern techniques to the village problems of agriculture, health, small industries, and applying this knowledge in a spirit of co-operation and service. Such was the view that led Rewi Alley to take his staff and his boys on the long trek to Kansu in 1944. In harsh and poor surroundings they have built up a unique school. Technical training is given in divisions or projects—transport, machine-shop, cotton, pottery, etc.—each of which is related directly to local resources and common village needs. General education in basic subjects is parallel but linked to practical work—Chinese, 'technical' English, the sciences and mathematics called for by projects. Through the whole course runs the principle of co-operation: whether training in the methods of co-operative organization or work with the villagers or self-government within the school.

The study is a tribute to a remarkable teacher and leader. But FAO has made it with a wider aim: that education everywhere may examine in detail the programme and budget, the background, achievements and set-backs of Shanton Bailie School, and draw inspiration from it. No experiment can be duplicated, least of all an experimental school; but Rewi Alley's approach to technical training, to teacher training and the village school, to co-operatives—these may well be used elsewhere.

UNESCO: FUNDAMENTAL AND ADULT EDUCATION

During October a small meeting of experts in indigenous and folk-arts was held. The individual reports contributed by members (covering experiences in Indonesia, Belgian Congo, France, Peru) and their summary report as a committee have been reproduced in offset form (Unesco/Ed/ou/s). This document will serve to guide Unesco action in this domain during 1950. To

sum up briefly, the committee wanted to have more fundamental research carried out: partly on the side of anthropology (comparison and analysis of factors making for the decay of folk-arts, for their occasional revival, and so on) and partly in the applied field (effects of government intervention and of the growth of artisan co-operatives).

Later in October the Consultative Committee on Adult Education met in Paris. With membership¹ on a regional basis this group was fully alive to the needs of fundamental education and helped to steer the Unesco programme towards a more integrated concept—what may be conveniently termed *éducation populaire* in French, but remains in English usage ‘fundamental and adult education’. The Committee studied the 1950 programme in detail and advised the Secretariat on the steps that should be taken.

Recent publications from the Education Clearing House are: in offset form—gratis on request:

- Unesco/ED/Occ./1 Summary Report of the Rio Seminar (on literacy campaigns and adult education in the Americas)
- Unesco/ED/Occ./2 Preparation of reading matter (for new-literates) by Dr. Rodriguez Bou
- Unesco/ED/Occ./3 On Adult Education. Two articles by Dr. Yang Hsin-Pao and Dr. Homer Kempfer
- Unesco/ED/Occ./4 Selected bibliography on literacy (the cumulative abstracts from the ten issues of *F. E. Abstracts* published during 1949)
- Unesco/ED/Occ./5 Report of Committee on Indigenous Arts.

In printed form there is:

Fundamental Education: description and programme: 84 pp. 20 cents., 6d., 75 Frs. This is a setting out of the underlying principles, the elements and the organization required for a programme of fundamental education, whether a local project or a national scheme.

Other monographs and studies are in the press.

The second volume of *Study Abroad—International Handbook of Fellowships, Scholarships and Educational Exchange*, is now in preparation. The English-language edition is expected to be on sale at the beginning of December 1949 and the French edition early in January 1950. A Spanish translation of a portion of the book is also in course of preparation. Copies are obtainable from Unesco sales agents or direct from Unesco House at the price of \$1.25, 6s. or 350 Francs.

The second volume runs into some 350 pages (as compared with the 224 of volume I) and is divided into four sections, each of which gives particulars of the programmes of the agencies organizing the exchanges, and addresses to which enquiries may be directed.

Section I, which in volume I covered 15,000 fellowships donated by 37 countries, now covers 52 countries, 20 non-self-governing and Trust territories, the United Nations and Specialized Agencies and international non-governmental organizations.

Section II contains the first results of Unesco's enquiry into programmes existing for the interchange of teachers between countries and reports opportunities for some 3,000 teachers from 18 countries to accept short-term appointments abroad.

¹ Mr. C. H. Barbier (Switzerland), Mr. J. Dumazedier (France), Mr. E. Green (U. K.), Dr. H. Hunsaker (U.S.A.), Mr. J. Novrup (Denmark) Dr. K. G. Saiyidain (India), Dr. F. Tude de Souza (Brazil), Dr. E. Zaki (Egypt).

Section III reports programmes for the interchange of 30,000 to 40,000 workers. In this field, Unesco has maintained close co-operation with the International Labour Office, which has supplied the information concerning the international movement of trainees and apprentices for training and practical experience. Unesco has concentrated its enquiries on opportunities existing for agricultural and industrial workers to travel abroad for educational and cultural purposes.

Section IV publishes the results of Unesco's survey in 11 European countries of some 180 national and international organizations sponsoring exchanges of young people—i.e., under 25 years of age—between countries for educational and cultural purposes.

In addition, the second volume contains a statistical commentary on volume I and supplement.

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